

The principal instructional leadership model based on action learning to Improve Quality Education (SDGs 4)

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Abstract: The principal instructional leadership is the ability of the principal to develop a conducive learning atmosphere in the school to improve quality education (SDGS 4). The general objective of the study is to produce a model of principal instructional leadership based on action learning that valid, practical and effective model. The methodology of this research is quantitative with an Research and Development approach, by ADDIE model. This needs analysis involved 12 districts and 7 cities in West Sumatra with a total of 117 principals. Meanwhile, the model test was conducted on elementary school principals in Tilatang Kamang District, Agam Regency. The research results are; 1) conducting a needs analysis with an achievement of 88.29% and an average score of 4.41; 2) designing, designing and expert validation of the product. This model has been tested on principals, with a syntax implementation value of 4.03 (80.50%). This model is very practical to apply with a value of 4,01 (80.25%) and participant activity of 4.03 (80.61%). Every problem found in the field related to the principal's instructional leadership uses the Bintang, Meteor, Bima and Sakti models in each indicator. Further researchers can apply it to junior high schools with more complex problems.

1 Introduction

The principle instructional leadership is one of the most important components to reach quality education (SDGS 4). As a teacher given the trust to carry out additional duties as the principal (Peraturan Menteri Pendidikan Nasional Nomor 6 Tahun 2018), then the principal should have the ability to influence, direct, move and guide the people he leads. This ability is often referred to as leadership. When a principal has good leadership skills, then the people he leads will be willing to cooperate to the maximum without any coercion from within him. The principal leadership model is an important factor in the development of an effective

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school [1-2]. Yakavets [3], if you take a deeper look at the leadership model, there are nine types of leadership models that every principal must be mastered. One of the models of leadership that the principal have to have the model of instructional leadership.

Instructional leadership is the ability of a person who is in this case the principal to develop a learning atmosphere that is conducive to the various areas that he coordinates such as conducting learning supervision, professional development, learning resources and creating learning support in order to improve the quality education (SDGS 4) in the school environment he manages [4]. Instructional leadership affects teaching approaches that relate to learning outcomes as well as enhance the potential of students [5–7]. The principal need to know and understand the problems facing teachers. As a result, many researchers have offered school leaders to apply this concept of instructional leadership in the performance of their duties and responsibilities in schools [8]

In research conducted by (3) shows that instructional leadership has a direct influence on the performance and commitment of teachers [2,9,10]. Besides, instructional leadership also indirectly influence the learning achievement of students through teacher performance. It shows that in carrying out his leadership as the principal, then every principal should use the model of instructional leadership. But if we look at the conditions on the ground, there are still a lot of gaps between what is idealized and what is actually happening. This is evident from several phenomena that the author encountered in the field, i.e. (1) there is still a minimum in socializing the vision and mission of the school to the school staff; (2) the principal still has difficulties and lack of attention to the learning activities integrated with the curriculum; (3) the head has very little time to provide in analysing the various professional development of teachers; (4) the principal is still less optimum in the formation and development of school personnel; (5) the development of the teacher individually in the school environment still needs to be improved especially for the teachers who are judged to be performing; and (6) the school conditions are still less conducive.

Based on the data found that the author described above, in this study, the author focuses on the instructional leadership model based on action learning. It can be summed up, an approach that focuses on the substance of the real problem, involves a team, digs questions and gets feedback and takes action or taking action on a problem that emerges. This models can improve the quality education (SDGS 4). Where the objective of this research is generally to produce the principal instructional leadership model based on action learning. This novelty model has a huge impact on the principal's leadership because it is able to completely resolve the problems faced by the principal.

2 Methods

The methodology of this research is quantitative with an R & D (Research and Development) approach, using the ADDIE model. This needs analysis the model involved 12 districts and 7 cities in West Sumatra with a total of 117 elementary school principals. Meanwhile, the model test was conducted on elementary school principals in Tilatang Kamang District, Agam Regency. The process of this research is to determine the use ADDIE.

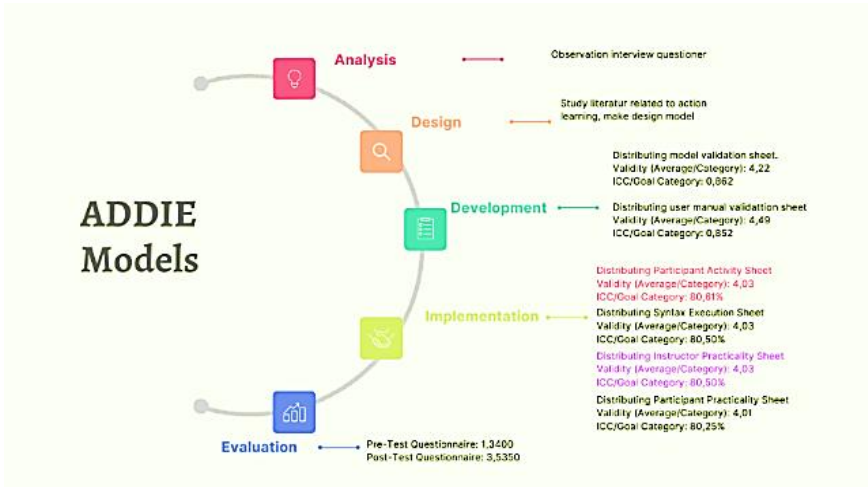


Fig. 1. ADDIE Models.

Research using the development model is carried out using the ADDIE model (Analysis, Design, Development, Implementation and Evaluation), which is included in the research process. Analysis: collect information by making observations by interviewing several sources to collect data. Design: conducting literature studies by linking it to action learning and creating product forms Development: carry out validity by distributing assessments Implementation: Researchers apply product designs that have been created by carrying out various assessments from experts Evaluation: Students under the assistance and supervision of researchers are guided to carry out a systematic and organized assessment of the product.

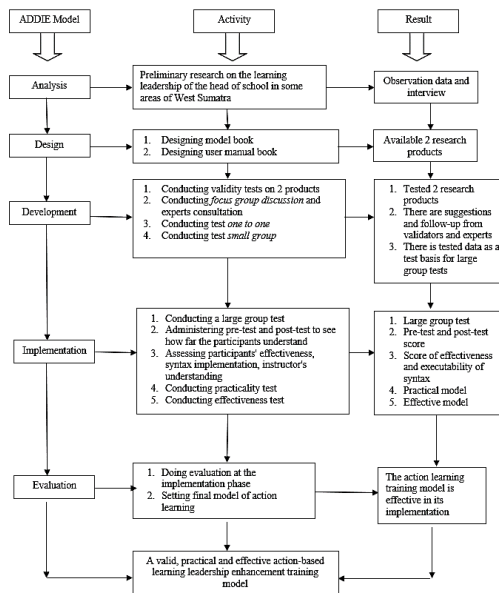


Fig. 2. Research Flowchart.

3 Results and discussion

3.1 Communicating vision and mission

The findings obtained in this study relate to indicators communicating vision and mission, the average score rate is 4.55 which states that respondents very much need a clear communication stream in the implementation of the vision and the mission in school with a percentage rate of 90.91%. It is recognized because of many obstacles at the time of formulation and implementation this vision and mission, as stated by principal that the level of understanding of the school citizens and curiosity of the citizens is still low. Therefore, building effective and efficient communication is essential in the realization of the vision and mission of the school. In this indicator, the author develops a model that can be applied principals to focus on problem base on action learning, namely with the BINTANG concept (**B**uilding communication, **I**ntegrity, **N**ew Insight and Learning, **T**eam Building, **A**ctive in Collaboration, **N**avigation, and **G**oals).



Fig. 3. BINTANG Models for Communicating vision and mission Indicator

3.2 Integrated learning activities according to the curriculum

Data on integrated learning activities according to curricula were on average 4.23 with an access rate of around 84.53%. It proves that the need for learning activities that fit the curriculum is still urgently needed. The results of the observation sheets circulated indicate that many teachers have less understanding of learning plans that are better in line with the standards of the expected process, besides, there are still many less capable of designing learning activities and disregarding what is available on the Internet. Hence, the implementation of the curriculum should be done as well as possible starting with the planning, implementation and evaluation of curriculum. In this indicator, the author develops a model that can be applied principals to focus on problem base on action learning, namely with the METEOR concept (**M**anage of Learning Activity, **E**ksplorasi, **T**ask, **E**laborasi, **O**rientation in Learning, and **R**efleksi)

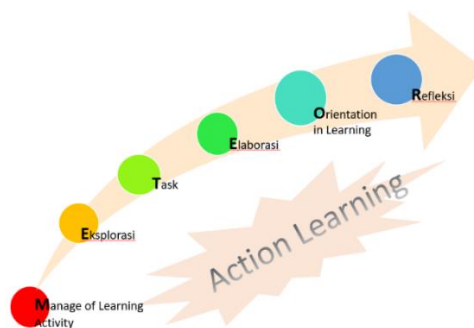


Fig. 4. Action Learning (METEOR)

3.3 Construction and staff development

The implementation of staff building and development is at an average score of 4.33 with an access rate of 86.56%. This was submitted by several school directors who stated that the implementation and development of staff is still not well carried out, due to the still shortage of teachers and the lack of training provided by the government. Furthermore, although learning supervision activities have been carried out periodically with a percentage of implementation of about 80% but of the supervision results that have been done still many teachers lack understanding especially in terms of learning techniques and learning models. In this indicator, the author develops a model that can be applied principals to focus on problem base on action learning, namely with the BIMA concept (**B**uilding **R**elationship, **I**nitiating **A**ction, **M**ission, **A**ward)



Fig. 5. Action Learning (BIMA)

3.4 Creating a conducive school climate

Creating a favourable school climate can be seen from an average score of 4.56 with an access rate of 91.18%. Almost all the head of the school stated that the relationship between the staff at the school was sufficiently good and conducive and this was very much needed to beined for its endurance. Only a few statements by the head of the school stated that it was not maximum. But the physical environment of the school still needs to be improved, as there are still a lot of learning facilities that are still lacking, the school facilities are still very scarce. The condition of support facilities such as toilets is inadequate, the building 50% is still old and less conducive, the fence about 50% is also very worrying. And the school facilities of the building are still under control and not in accordance with the rombel of study. In this indicator, the author develops a model that can be applied principals to focus on

problem based on action learning, namely with the SAKTI concept (Safety at School, Awareness, Know the Ropes and Keep Track, Take in Hand, Investigation) For more clarity the results of the analysis of learning leadership based on the indicators that the author mentioned above, can be viewed below in Table 1.

Table 1. Analysis of Learning Leadership Based on Indicators

Indicator	Average Score	Level Attainment
Communicating vision and mission	4.55	90.91 %
Integrated learning activities according to the curriculum	4.23	84.53 %
Construction and staff development	4.33	86.56 %
Creating a conducive school climate	4.56	91.18 %
Total Average	4.41	88.29 %

Based on the data in Table 1, the respondents really need this instructional leadership. Where the average score is 4.41 with an access rate of 88.29%, then all the indicators instructional leadership are important to apply. This is reinforced by Sindhvad in his research which states that learning leadership is imperative to be enhanced by every head of school both in terms of learning supervision, professional development, learning resources and providing learning support that can improve the quality of learning in the school he leads.

3.5 Development

3.5.1 Validity test result

Guidelines Book Model tested its validity using support theory indicators, syntax, social systems, reaction principles, support systems, instructional impact and model sender impact. For more clarity the validation results of the 4 validators can be viewed in Table 2.

Table 2. Validity of the KPKS-BAL Manual Book Model

No	Validator	Field	Average	Interpretation
1.	Validator 1	Content	4.47	Highly Valid
2.	Validator 2	Educational Technology	3.79	Highly Valid
3.	Validator 3	Language	4.75	Highly Valid
4.	Validator 4	School Element	3.89	Highly Valid
Total Average			4.22	Highly Valid

Based on Table 2 we can be concluded that theoretically the guidelines model are valid according to the validator, i.e. with an average rating of 4.22. This means that model is valid for improving the learning leadership of the head of school. Participants' manual book tested validity based on subtitles, presentation, technical and linguistic aspects. For more clarity, the validation results of the guide can be viewed from Table 3.

Table 3. Validity Test of the Participants' Manual Book

No	Validator	Field	Average	Interpretation
1.	Validator 1	Content	4.47	Highly Valid
2.	Validator 2	Educational Technology	4.00	Highly Valid
3.	Validator 3	Language	4.79	Highly Valid
4.	Validator 4	School Element	4.68	Highly Valid
Total Average			4.49	Highly Valid

Based on Table 3 we can be concluded that theoretically the participants' guidelines model are valid according to the validator, with an average score of 4.49. This means that the model guidelines are valid to enhance the principal leadership.

3.5.2 Small group test result

There are several activities undertaken in order to test small groups, namely assessing the level of understanding in the form of pre-test and post test. The processing of pre-test and post-test data is carried out using SPSS version 20 where there are 6 participants model training. For more clarity, the processing results of the pre- test and post test data can viewed below in Table 4.

Table 4. Descriptive Pre-Test and Post Test Values in Small Group Trials

	N	Mean	Std. Deviation	Minimum	Maximum	Variance
<i>Pre-test</i>	6	1.58	0.147	1.40	1.80	0.022
<i>Post test</i>	6	4.83	0.408	4.00	5.00	0.0167

Based on Table 4 we can see that the average pre-test value is 1.58 with standard deviation 0.147 and variance 0.022. The post test value is 4.83 with a standard deviation of 0.408 and a variance of 0.0167. Then there is an increase of 3.25 points on average from a total of 5.00. Besides, the research team also looked at the syntax implementation of the instructional leadership model training participants. Out of the six participants with an average of 3.82 the score reached 76.39% with the interpretation performed well. The researchers also looked at the practicality of training instructors with an average of 4.52 which means very practical. As far the practicality assessment of a small group of six participants there was an average score of practicality and 4.43 at a level of achievement of 88.67 with a very practical interpretation. Furthermore, the evaluation of the participant's effectiveness in this instructional leadership model has an average of 4.33 with an access rate of 86.67%, which is to be very active interpretation. And the last thing the researchers do is perform a test of effectiveness, which is to find a difference between the pre-test average and the post-test mean of small group trials of $4.83 - 1.58 = 3.25$. Then it can be concluded that after implementing the KPKS-BAL model there was an increase of 3.25.

3.6 Implementation

This implementation stage is the implementation phase of the model in larger group tests. The test of this large group is to get a recognition from the users of this instructional leadership model product in terms of its effectiveness and usefulness. This large group test was conducted for 20 head schools in Tilatang Kamang district. There were several activities that researchers do during this large group test, namely spreading pre-test and post test sheets, syntax implementation, participant effectiveness, instructor understanding, model practicality of both instructors and participants. To see more clearly how the participants' understands of the model training by giving pre-test and post test can viewed below in Table 5.

Table 5. Descriptive Pre-Test and Post Test Values on Large Trial Group

	N	Mean	Std. Deviation	Minimum	Maximum	Variance
<i>Pre-test</i>	20	1.3400	0.198	1.00	1.70	0.39
<i>Post test</i>	20	3.5350	0.549	2.60	4.50	0.302

Based on Table 5 the average pre-test value is 1.3400 with standard deviation of 0.198. Whereas for post test value is 3.5350 with standard deviation of 0.549. Then there is an increase in the average value of 2.195 points. In addition, the research team also looked at the practical implementation of the model training participants. Out of 20 participants with an average of 4.03 at an achievement score of 80.50 % with interpretation performed well. The researchers also saw the practicality of the training instructor with a average of 4.68 which means very practical. As far the practicality assessment of a small group of 20 participants, there was an average practice score of 4.01 at an access rate of 80.25% with a very practical interpretation. Furthermore, the evaluation of the effectiveness of participants in this KPKS-BAL model has an average of 4.03 with an access ratio of 80.61%, which is to be very active interpretations. And the last activity that the researchers did was to perform a test of effectiveness, i.e. to find a difference between the pre-test averages and the average post-test values of the small group trials of 4.83 – 3.25. Then it can be concluded that after applying the model there was an increase of 3.25. This model is very helpful in improving the **quality of education** (SDGS 4) in schools, especially for school principals.

3.7 Evaluation

3.7.1 *Evaluation of the implementation phase*

The implementation of the large group test that was tested on the head of the primary school in Tilatang Kamang district was quite smooth. This activity is carried out in Public Elementary School (SD Negeri 11 Gadut) Tilatang Kamang, which is one of the core schools. Based on the preliminary research carried out, there are four main issues that should be enhanced in connection with the leadership of the head of school learning, namely vision and mission; learning integrated with the curriculum, training and development of staff and creating a conducive school climate. During the implementation of the KPKS-BAL model, the head of schools, educational coordinators, as well as educational supervisors are active in discussions with the research team. In the application of the KPKS-BAL model it also gives the ability to the head of school to apply the ability of critical thinking in conducting his leadership in the school.

3.7.2 *Final model of action-based learning leadership*

The training on the KPKS-BAL model that the author gave to the head of the school must have gone through various processes of perfection of this model. It is stated by Joyce that there are several elements that can be used as guidelines or benchmarks in compiling a model, namely syntax, social system, principle of reaction, support system and model effect. Here is an overview of the investigative activities that the author has done, which is as follows.

3.8 Discussion

Based on the analysis of the data described by the author in the previous section, it is considered necessary to always give instructions to the head of the school in order to be able to apply this model of learning leadership in the performance of his duties and responsibilities as head of school. If we look at the field, this model of learning leadership is still less applied by the head of school, because basically the head is more focused on the administration and management of the school that has become a habit. Meanwhile, the crucial aspect of learning leadership is still less optimally applied by the head of school. Similar things are still

experienced by neighbouring countries like Malaysia which also experience the same problems related to learning leadership. The implementation of this model of learning leadership in all schools there are no significant differences, various problems are still felt related to the leadership of this learning and affect the school's previously established goals [12].

The results of the preliminary research that the author has done earlier, revealed that there are some problems in this learning dream that relate to the vision and mission of the school, the integrated learning activities according to the curriculum, the training and development of staff and the creation of a conducive school climate. As a result of some the problems that have arisen, the principal is very much looking forward to a way out of training or instructions to help them get rid of the problem of learning leadership. Thus, the head of school can create a conducive academic atmosphere and can improve the performance of the school he leads, both on the part of the teacher and the students. The results of the preliminary study data processing show that the head of the school is very much in need of improving learning leadership skills in terms of controlling its school which is conducive to have an average score of more than 90%. Furthermore, learning activities that are integrated according to the curriculum as well as training and development of staff and creating a school climate that conduces at an average of 84%. This level of achievement is in the category of very necessary one kind of model of instructional leadership that is able to cope with various problems that arise in the school.

Following on from the data processing results of the preliminary study that the author has done earlier proves that the vision and mission indicators have a very important role to play with a score of 90,91%. From the scores achieved, the head of the school is already able to communicate the mission and vision well. With an understanding that each school staff has of the vision and mission of the school, then the visions and missions previously created to produce a performance school can be fulfilled as it should be without the gaps that arise as a result of misunderstanding of the mission and vision formulated. The vision and mission of the school has a very important role in the development of school and to symbolize the identity of school concerned [5-6]. Therefore, the vision and the mission formulated must be able to adapt to the conditions of school environment so that with the alignment between the situation and conditions in the school can produce a major change and the school progress towards a success with a sustainable process [15].

Next to the second instructional leadership indicator, that of integrated learning activities according to the curriculum has a score of 84,53%. This indicates that there is the need to follow up on the learning done by teachers in the classroom. The principals say all teachers have designed the learning plan as thoroughly as possible, but not every teacher can implement every learning plan that is made to the maximum. Because basically the curriculum that is made must be adapted to the condition of the student, not even the student who has to adapt himself to the Curriculum in force. Therefore, it should be the duty and responsibility of the head of the school to always maximize the learning activities carried out by its teachers. Because indirectly the performance of teachers will affect the learning performance of students. The principal must be able to plan, coordinate and evaluate all the learning activities carried out by the teacher with full responsibility without making the teacher feel stressed by the tasks assigned to [16]. In addition, in the implementation of the principal instructional leadership is also expected to be able to do the construction and development of staff well. It's like supervising his teachers. Supervision is not only meant to look for the mistakes of the teacher but with the presence of supervision is expected between the head of the school and the teacher will engulf a degree of openness so that the head can give input for the progress of his future teacher. According the research that supervision of learning is a very important part in order to carry out the construction and implementation of

the school development, whether it is carried out directly or activities conducted indirectly [17]. Effective supervision can have an impact on the increased confidence of teachers in the implementation of the learning process in the classroom such as optimization learning media [18–20].

Then for the fourth indicator, learning leadership also needs to be supported by a conducive school climate. Based on previous data processing results, an average score of 91.18% was obtained, indicating that the head of the school needed various programmes to create a more conducive school climate. The learning leadership model has the potential to enhance a school climate that is even more conducive and effective for teachers while conducting learning activities in the classroom. Then every head of school should use this learning leadership model to make the school climate more conducive [21].

Based on the explanation presented above, the one way that can improve the instructional leadership of principal is by using an Action Learning for instructional leadership Model. Characteristics of the model are 1) the model developed based on the analysis of the needs flexible and dynamic according to the conditions in the field; 2) the use of syntax that can sharpen the critical thinking is the head of the school at the time of solving a problem that occurs on the ground; 3) In use of this model first given socialization and training, so that the users of this Model in particular the principal can understand more in connection with this model; and 4) the Model instructional leadership model is an action based learning or action based model, so every activity carried out, can be done directly in the form of implants. The meaning of action learning in the instructional leadership model is that the model developed is based on quick and accurate action using critical thinking to solve problems encountered in the performance of his duties as a head of school. The emphasis on action learning is aimed at developing organizations in this school case to further advance.

By applying this action learning it is hoped that the head of the school can overcome the problem and can find a way out of the problem that occurs and not easily panic in dealing with it. This is also reinforced by research conducted in South Korea action learning is used to conduct leadership development and development of an organization [22]. The application of the KPKS-BAL model has a positive impact on the implementation of the model identification. It is also compatible with the characteristics of the instructional leadership model, namely, a) this model is developed based on the results of a research; b) the model focuses on action learning with the procedure of identification of problems, communication, reflection, setting action, selecting alternative action, implementing action and evaluating such action; and c) the Model is developed to improve learning leadership for each head of school especially those in elementary school. So from that, this instructional leadership model is considered suitable to be applied to enhance learning leadership in the world of education.

4 Conclusion

Development of Leadership Model Learning Head School Based Action Learning in Elementary Schools of West Sumatra or abbreviated with the instructional leadership model has been implemented for two years with some conclusions, as follows: (1) The school leader's learning leadership is crucial for further improvement, which refers to an average of 4.41 points and an access rate of 88.29%. With the results already achieved, this can be a guideline for the school leader to use this model of learning leadership in carrying out his duties and responsibilities as head of school, especially those related to communicating the vision and mission of the school, integrating learning with the curriculum, training against teachers and creating a more conducive school climate. (2) The model was named instructional leadership model because it is based on the real problems experienced by the

head of the school during the performance of his duties as a school leader. In the process of development of the instructional leadership model used the ADDIE model with the product developed as a model manual and participant manual book as well as in the development of this model carried out several tests, namely field trials on small groups and large groups. (3) The tested instructional leadership model is a valid, practical and tested model of its effectiveness in improving the learning leadership of the head of school in terms of communicating the vision and mission of the school, learning integrated with the curriculum, staff development, and can create a conducive school climate. (4) The program that the author will do at the time of further research is to use the leadership learning model of the head of school based on action learning in secondary school. Whereas, according to the author with the model of learning leadership head school-based action learning can also solve the problems experienced by the heads of school that exist in the middle school.

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